

# Notice of Allowability

Application No.

09/871,068

Examiner

Stephen E. Jones

Applicant(s)

JANG, SEI-JOO

Art Unit

2817

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the examiner's amendment dated 4/5/04.
2. ☒ The allowed claim(s) is/are 16-18.
3. ☒ The drawings filed on 31 May 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 4/5/04.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

The application has been amended as follows:

Claim 16 has been shortened/amended as follows below, and Claim 17 has been amended to include the subject matter of original Claims 10, 15, 17 and the last part of original Claim 16 (i.e. the part of original Claim 16 that is no longer recited in new Claim 16).

Claims 1-15, and 19-30 have been cancelled.

The allowed claims follow:

16 (amended). The filter of Claim 17; wherein said resonator is a cylinder shape having a round top, a round bottom and a continuous side between said top and bottom.

17 (amended). A duplexer filter of resonator loaded cavities for transmitting and receiving signals to and from a device comprising:

a first electrical connector for transmitting and receiving signals;

a second electrical connector for passing a signal from the device to said first electrical connector;

a third electrical connector for passing a signal to the device from said first electrical connector;

a first filter of at least three resonator loaded cavities coupled between said first and second electrical connectors to allow exchange of a

desired frequency between said first and second electrical connectors,  
wherein each of said cavities is loaded with a resonator; and  
a second filter of at least three resonator loaded cavities coupled  
between said first and third electrical connectors to allow exchange of  
a desired frequency between said first and third electrical connectors,  
wherein each of said cavities is loaded with a resonator;  
wherein said first filter is stacked in relation to  
said second filter, as opposed to being positioned side-by-side each other;  
wherein side-by-side positioning of said cavities is relative to the sides of the  
resonators , and wherein stacking of said cavities is relative to tops and bottoms  
of said cavities;

wherein each of said first and second filter each  
include at least four resonator loaded cavities coupled side by side in at least a  
two-by-two matrix.

18 (rejoined original). The filter of claim 17, wherein at least one cavity of said  
first set is negatively coupled to at least one cavity of said second set in order to  
employ elliptic function filter theory in said filter.

The following is an examiner's statement of reasons for allowance:

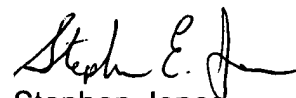
The prior art of record does not teach the particular arrangement as in Claim 17  
including that the first and second filters each include at least four resonator loaded  
cavities coupled side by side in at least a two-by-two matrix.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is 571-272-1762. The examiner can normally be reached on Monday through Friday from 8 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Stephen Jones  
Patent Examiner  
Art Unit 2817